# Information Bulletin

***Governor's Office of Emergency Services***
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## WEST NILE VIRUS AND LAW ENFORCEMENT

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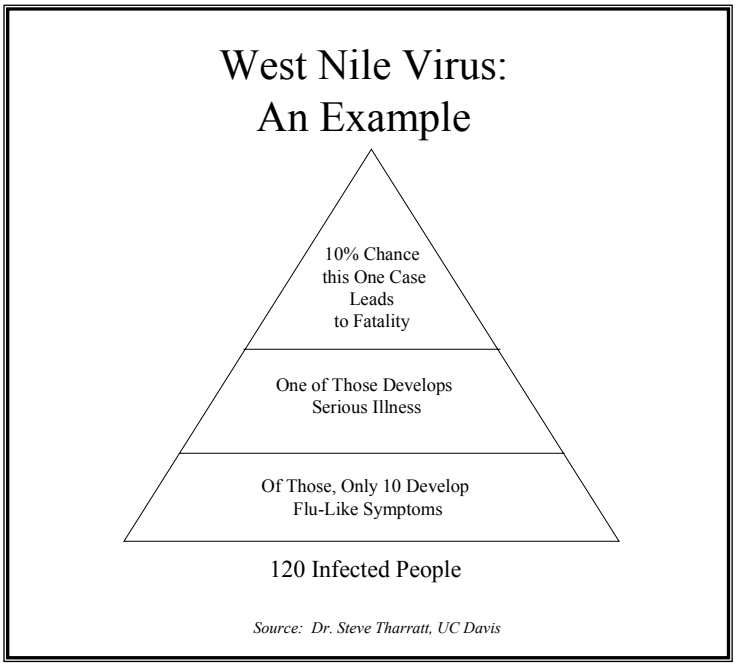
**Background**

There are many hazards facing law enforcement and public safety personnel on any given day. A natural hazard that seems to be moving toward California is known as West Nile Virus. Abbreviated WNV, West Nile Virus is spread by infected mosquitoes. It has caused illness and some fatalities on the East Coast, and authorities indicate that it could arrive on the West Coast by this summer. This Information Bulletin contains general information on WNV, and specific information on how it may affect your work in the field, and contact with those that may be infected with WNV.

**The Basics**

West Nile virus is a mosquito-borne disease that can cause encephalitis, a brain inflammation. WNV is closely related to St. Louis encephalitis virus (SLEV) which is found in the United States and to Kunjin virus (KV) which is found in Australia, some Western Pacific islands and parts of South East Asia. According to the U.S. Centers for Disease Control and Prevention, 4156 people in the U.S. tested positive for the West Nile Virus in 2002, and 284 people died of the virus. Many more people were likely to have been infected with the virus, but experienced mild or no symptoms, and were never tested.

Statistically, a person's risk of contracting West Nile is low. In most areas where the virus is established, only 1% of the area's mosquitoes carry the virus. Less than 1% of people bitten by these infected mosquitoes develop serious complications from the virus; the remainder exhibit flu-like symptoms, or no symptoms at all. Those at highest risk are the elderly and people with weakened immune systems; it is important, however, for *all* people to protect themselves from mosquito bites to minimize the risk of infection.




This illustrates that though WNV can lead to serious health risks, the probability of any one bite or infection resulting in serious illness or death is very low. This does not mean taking precautions is unimportant, however.

- ✓ WNV is not contagious from person to person. Those arrested or detained cannot spread WNV even if they are infected or symptomatic.
- ✓ WNV symptoms are very similar to those of the flu. Only a physician can make a clear diagnosis.
- ✓ Treatment for WNV is supportive. There is no vaccine or preventative at this time.
- ✓ The few serious cases result in brain swelling, and can in rare cases result in death. Diabetics and those over 50 may be most at risk.

**Officer Safety Precautions**

For those working in the field, particularly those in remote or mosquito-prone areas, consider applying an insect repellent containing DEET (N, N-diethyl-meta-toluamide) to exposed skin. (Dusk and dawn are times of peak mosquito activity, but they can bite at any time.) When possible, wear long sleeves, long pants and socks when outdoors. Mosquitoes can however bite through clothes, so spray the outside of uniforms or clothing. The Centers for Disease Control does not recommend spraying skin under clothing with DEET.

**Be Observant**

Dead birds may be a sign that WNV is circulating between birds and the mosquitoes in the area. Over 130 species of birds are known to have been infected with WNV, though not all infected birds will die. By reporting unexpected concentrations of dead birds to local health departments it may be possible to get an early warning of the arrival of WNV in a given area of California.

**Further Information**

The California Department of Health Services' website has a special section on WNV:

http://westnile.ca.gov/general

The Centers for Disease Control also has valuable information and education materials:

http://www.cdc.gov/ncidod/dvbid/westnile/

*Michael Guerin prepared this Information Bulletin with assistance from Dr. Steven Tharratt of the University of California, Davis, Medical Center. Research material included items from the California Department of Health Services, Centers for Disease Control and the US Geological Survey's Center for Biological Informatics.*